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OKAMOTO PRECISION SYSTEMS

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AERO LAP



Aero Lap

Aero Lap enables automatic slickenside mirror finishing for irregular shapes of punches, dies, pins and small-sized moulds by applying unique technology to accomplish the task that was previously performed almost entirely by manual labour.

Technology

Obtaining elasticity and adhesion by applying multi-solution and enable to polish and rub bythe composite abrasives (Multi-Cone), which are gliding on the work target surface at high speed.



Aero Lap

Aero Lap ermöglicht es, unregelmäßige Profile auf Spiegelglanz zu polieren. Prägestempel, Formkerne für Spritzwerkzeuge, Schnittstempel, und Matrizen können maschinell geläppt werden, was bisher fast ausschließlich manuell zu bewerkstelligen war.

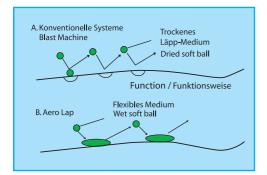
Technologie

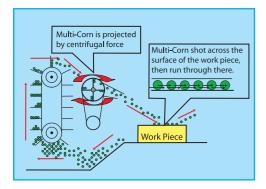
Ein spezielles, elastisches Medium, welches mit abrasivem Material versetzt wird, gleitet mit hoher Geschwindigkeit über die zu bearbeitende Oberfläche, ohne diese geometrisch zu verändern.



AERO LAP

Specifications · **Spezifikationen**







SPECIFICATIONS

Standard Model (AYT-100)

- Power Source 1-phase (100V)
- Air Pressure 0.5 Mpa
- Size W470 x H1300 x D650 mm
- Application Size 200 x 200

Large-Sized Model (AYT-300)

- Power Source 1-phase (200V)
- Air Pressure 0.5 Mpa
- Size W700 x H1600 x D900 mm
- Application Size 300 x 300



SPEZIFIKATIONEN

Standard-Modell (AYT-100)

- Elektrische Anschlusswerte 1-Phase (100V)
- Luftanschluss 0.5 Mpa
- Platzbedarf B470 x H1300 x T650 mm
- Werkstückgröße 200 x 200

Modell (AYT-300)

- Elektrische Anschlusswerte 1-Phase (200V)
- Luftanschluss 0.5 Mpa
- Platzbedarf B700 x H1600 x T900 mm
- Werkstückgröße 300 x 300



Feature

- Easy Instant Lapping for Various Shapes
- Uniform Slickenside Mirror Finishing and Extremely Less
 Unnecessary Damage and Marring Shape
- Enhance Durability and Prolong Lifespan of Mould & Die (Especially Cold Forging)
- Improving PVD / CVD coating (Prior / Finishing Lapping)
- No Generating Dust and Excessive Noise

Multi-Cone is to use exclusively for AERO LAP MACHINE!

Aero Lap has been materialized for irregular shape mould mirror finishing by projection-method lapping using damped abrasives, which the conventional lapping could not accomplish effectively.

Furthermore, **the damped abrasives** enable to improve the followings:

1. High Rate of Lapping Efficiency

Enables efficient lapping in short time without excessive damage.

2. Clean Lapping

- Clean working environment without generating dust.
- Easy mechanical maintenance.

3. Measured Abrasives Meet Lapping Needs

- Providing several abrasives for various lapping (rough polish glossy polish).
 - 4. Low Running Cost
- The abrasives can be used for a long period.



Merkmale

- Problemloses Läppen unregelmäßiger Profile.
- Gleichmäßige Bearbeitung aller Flächen ohne Veränderung der Geometrie.
- Standzeitverlängerung aller Werkzeuge (Bohrer, Fräser, Umformstempel etc.).
- Geeignet für PVD / CVD Beschichtungen (Vor- / Spiegelglanz-Läppen).
- Geringe Staub- und Geräuschentwicklung.

Multi-Cone ist speziell für AERO LAP-SYSTEME entwickelt worden!

AERO LAP wurde speziell zum Erzeugen von Hochglanzflächen mit unregelmäßigen Profilen entwickelt. Die spezielle Zusammensetzung des Mediums ermöglicht nun eine Automatisierung dieses Prozesses.

Des Weiteren bietet das Medium folgende Vorteile:

- 1. Effektiv
- Schnellste Läppergebnisse ohne geometrische Veränderungen.
 - 2. Saubere Arbeitsbedingungen
- Keine Staubentwicklung.
- Einfache Wartung.

3. Medium an Anforderungen anpassbar

- Multi-Cone ist in verschiedenen K\u00f6rngr\u00f6\u00dfen lieferbar (vorpolieren – Spiegelglanz).
 - 4. Geringe Betriebskosten
- Lange Lebensdauer des Läppmediums.

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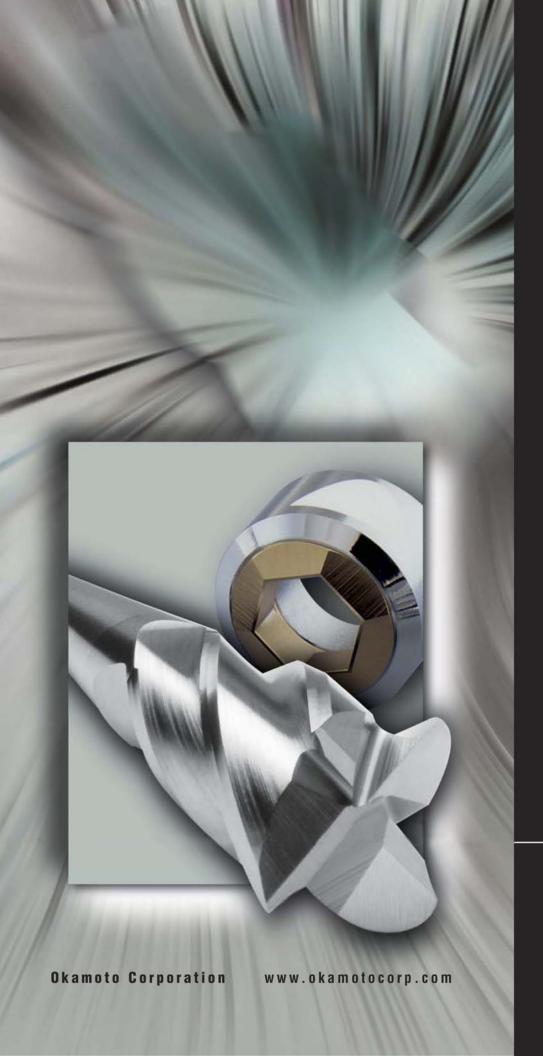
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Rapid Lap polishers make smooth work of hard-to-polish parts 10-25X faster!

Rapid Lap is the incredibly easy-to-use polishing machine that creates a mirror-smooth finish even on hard-to-polish parts. The Rapid Lap uses an exclusive, automatic, high-speed multi-cone technology - and a unique abrasive medium to do away with the need for manual polishing punches, dies, small-sized molds and other intricate parts.

Rapid LAP

Okamoto

Rapid Lap makes polishing a wide variety of materials and irregular shapes extremely safe and easy:

Rapid Lap dramatically shortens cycle-time for final polishing. Its unique lapping medium is a perfect balance of moisture and abrasive particulates - including diamond particles. Using a hurling device combined with air pressure, Rapid Lap's exclusive multi-cone lapping projects the abrasive lapping media in multiple high-speed passes to polish even the most irregular shapes to a mirror-sheen finish.

Rapid Lap's exclusive benefits include:

- Uniform mirror finishing avoids misshaping and minimizes surface marring to safely polish even the most intricate parts.
- Enhances durability and prolongs the lifespan of molds and dies (especially cold forging).
- Improved PVD/CVD Coating.
- User-friendly control system, straightforward design and operation, and maintenance requirements enable operators to master the Rapid Lap with minimal training.
- Low running cost the abrasive particulate solutions can be used over and over for long periods.
- Environmentally friendly operation Rapid Lap machines are quiet and produce little to no waste, minimizing discharges of oil and dust for disposal.
- Machine is supplied with all the media and accessories no hidden costs.

Reasons to use Rapid Lap:

- Lap and polish 10 25 times faster
- Get Ra 24 finish to Ra1.5 in 30 seconds
- Improves tool life up to 300%
- Hard-to-reach areas are no problem
- Virtually no material is removed
- Can be used on most all metals

APPLICATIONS:

- Cutting Tools
- Forming Tools
- Injection Molds
- Complex Shapes
- Punches
- Pins & Guide Rods
- Manifolds
- Jewelry
- Anything Smooth





